

B. El Salvador

El Salvador did not suffer the worst impacts from Hurricane Mitch. However, 230 people died and 130 were still unaccounted for. Private and public property losses were in the hundreds of millions of dollars. The storm forced 50,000 people from their homes. About 60 percent of all roads were in need of repair. Agricultural losses were severe as 80% of the maize crop was lost and heavy losses were sustained in the coffee and sugar crops.

FEMA contributed to the USAID mission's Intermediate Result #1, "Strengthened local, national, and regional capacity in natural disaster mitigation and preparedness and for effective response to natural disasters in such areas as vulnerability assessments, risk management, emergency operations, and community preparedness."

1. National Emergency Management System

FEMA proceeded with the project by bringing a team of experts in the beginning of the project to conduct an initial needs assessment. From the needs assessment, information on the country's emergency management system was collected, and potential activities were identified. FEMA's goal was to assist El Salvador in strengthening its emergency management system at the national level by working with the country's national emergency management agency, COEN (Comite de Emergencia Nacional). Following the needs assessment, representatives from COEN and local NGOs were invited to FEMA to participate in a FEMA sponsored one-week summit on emergency management in June 2000. The Summit provided an overview of principles and practices of emergency management and afforded the opportunity to visit a nearby state emergency operations center and a model disaster resistant community – Project Impact. The institutional issues that were considered were the national response plan, national emergency management laws and regulations and the national emergency operations center. FEMA wanted to work with COEN to review the existing national response plan, and emergency management laws and regulations, emergency operations center (EOC), and to find ways to improve them in order to give COEN greater leverage when responding to a national emergency.

FEMA attempted to offer technical assistance in the areas of emergency management laws and regulations and response support after the two January 2001 earthquakes to COEN, but the offers of assistance were not acknowledged or declined. At the request of the USAID Mission, FEMA however did evaluate COEN's current national emergency command center and a representative departmental command center and provided recommendations and design plans for improvements. Copies of the recommendations report were presented to USAID Mission, USAID/OFDA, COEN, and Cooperative Housing Foundation (CHF, the NGO tasked with the

responsibility of distributing CAMI funds in El Salvador to support the improvement of the national EOC). FEMA's understanding is that CHF reviewed and applied some of the recommendations.

FEMA also reviewed COEN's national response plan and found it to be technically comprehensive and well prepared. However, the plan appeared to be unilaterally developed without the concurrence and approval of participating ministries and organizations. FEMA feels that in order to ensure full cooperation from throughout the national government during a catastrophic event, the national response plan needs to be routinely reviewed and approved by all participating organizations. The signatures of officials from each Ministry on one plan, can provide legitimacy and commit the organizations to the process.

Although COEN is recognized nationally as an emergency management institution in El Salvador, it is still lacking in strength and in size. It has some talented individuals but has insufficient tools and technologies to support their activities. COEN needs to be willing to accept assistance from other emergency management agencies because COEN can benefit from the transfer of expert knowledge and experience.

While working on the Hurricane Mitch Reconstruction efforts, FEMA coordinated its activities and shared information with the USGS, NOAA, Peace Corps, USDA, HUD, EU, U.S. Southern Command, JICA, PAHO, SICA, USAID/OFDA, World Bank, IDB, UNDP, CEPREDENAC, CHF, and Partners of America on a routine basis.

2. Building Disaster Resistant Communities

During the planning and implementation of the Project Impact initiative, two powerful earthquakes struck El Salvador in January 2001, which caused severe damages in all three Project Impact communities. Despite the hardships caused by two natural disasters, the Project Impact communities have moved forward as evidenced by the following list of projects funded as part by the Project Impact initiative.

FEMA chose Cooperative Housing Foundation (CHF) as the in-country NGO to implement the Project Impact initiative in El Salvador because FEMA wanted an organization that has local language and cultural expertise, was already in country with the staffing surge capacity, basic understanding of emergency management, skills in training and capacity building and knowledge of the local environment, community and politics. CHF had excellent relationship with FEMA and the pilot Project Impact communities. CHF worked closely with FEMA's Project Impact consultant and kept FEMA informed on a quarterly basis through written reports, the FEMA consultant and telephone discussions.

Berlin

Developed a Mitigation Committee –which meets periodically and has been active in the response, recovery and mitigation planning, following the recent earthquakes.

Wrote a Risk Mitigation Plan –which encompasses short, medium and long-term components.

Stabilized slopes along an access road.

Reinforced river crossing, built small retaining walls and hardened a road – these projects are located at the base of Cerro Pelón, which often causes mudslides and landslides, threatening 300 people.

Stabilized slope on the road to Mercedes Umaña –12,000 people use this road.

Built a rock dike in the El Gallinero ravine –will help diminish the landslide threat and slow runoff velocity and reduce soil erosion.

Performed soil conservation on 79.5 hectares in Cerro Pelón and Las Palmas –reduced the volume and velocity of runoff by planting living walls, and installing rock walls, gabions, catchment wells and infiltration ditches along steep slopes to protect against landslides which threaten 15,000 people.

Carried out a creative education project –which includes 3 murals, painted on city walls; seven days of local radio coverage on Project Impact progress; creation of a poster; placement of signs in town, educating citizens on soil conservation; and providing community forums on what to do before, during and after disasters.

Some of the mitigation activities in Berlin were supported by assistance from a Crisis Corps volunteer.

Usulután

Developed a Mitigation Committee –which meets periodically.

Wrote a Risk Mitigation Plan –which encompasses short, medium and long-term components.

Reforested 6.5 hectares in El Ojuste and La Peña, which suffered heavy losses, following Hurricane Mitch. – the project benefits 3,250 people and will minimize future flooding. The project included training 185 people on problems caused by deforestation and provided information on the benefits of soil conservation projects.

Performed soil conservation project on 22 hectares in El Cerrito – the project included planting 7,500 meters of live barriers, constructing 100 meters of dikes and reforesting 3 hectares of land. Forty-four community leaders and fifty students were trained on the benefits of soil conservation. This project benefits 2,300 people.

Constructed a retaining wall –the wall will prevent flooding and the loss of hundreds of hectares of crops and damage to the infrastructure and to 21 communities. The project benefits 11,000 people.

Rehabilitated dike on Rio Grande –the public and private sectors will provide annual maintenance on the dike

Cleaned a canal and constructed a drainage ditch –this project will prevent flooding and water contamination. The project benefits 40,000 people.

Provided computer equipment to the city's Environmental Unit. Performed education projects –including painting 2 murals on city walls, televising 11 reports on the Mitigation Committee efforts, holding soil conservation workshops, airing radio announcements and videos to help citizens understand solid and liquid waste management, and holding community meetings on conserving natural resources.

Alegria

Developed a Mitigation Committee –which meets periodically. Wrote a Risk Mitigation Plan –which encompasses short, medium and long-term components.

Quebrada de Piedra micro watershed –the project consisted of dikes building a 7,000 meter live barrier, constructing 170 meters of rock walls, installing a 17 cubic meter retaining wall, constructing 215 cubic meters of gabion walls, reforesting 2 acres and digging 30 infiltration wells. Eighty-one people received training on soil conservation. The project benefits 800 families. Hardened two roads through slope stabilization –the project benefits 12,000 people and provides year-round access between Alegria and Berlín.

Performed civil infrastructure projects.

Built a retaining wall on the road to Mercedes Umaña.

Performed education projects –which included one mural painted on a city wall; local radio coverage for two days; one small report in the national press; one poster; and soil conservation workshops.